WHAT IS CLAIMED IS:

1. A laminated retardation optical element comprising:

an A plate-type retardation layer that acts as an A plate; and

a C plate-type retardation layer that is optically bonded to a surface of the A plate-type retardation layer and acts as a negative C plate,

wherein the A plate-type retardation layer comprises a cross-linked nematic liquid crystal, and the C plate-type retardation layer comprises a cross-linked chiral nematic or discotic liquid crystal.

2. The laminated retardation optical element according to claim 1, wherein the A plate-type retardation layer is a $\lambda/4$ retardation layer having a function of bringing, to light that passes through this retardation layer, a phase difference corresponding to a quarter of a wavelength of the light.

3. The laminated retardation optical element according to claim 2, further comprising a $\lambda/2$ retardation layer having a function of bringing, to light that passes through this retardation layer, a phase difference corresponding to a half of a wavelength of the light, the $\lambda/2$ retardation layer being optically bonded to a surface of the $\lambda/4$ retardation layer serving as the A plate-type retardation layer, on a side opposite to the C plate-type retardation layer.

4. The laminated retardation optical element according to claim 3, wherein the $\lambda/2$ retardation layer comprises a cross-linked nematic liquid crystal.

5. The laminated retardation optical element according to claim 3, wherein an angle between an axis of phase advance of the $\lambda/4$ retardation layer serving as the A plate-type retardation layer and that of the $\lambda/2$ retardation layer is 60 ± 10 degrees.

6. The laminated retardation optical element

according to claim 1, wherein the C plate-type retardation layer has a thickness of 5 µm or less.

7. The laminated retardation optical element according to claim 6, further comprising an additional C plate-type retardation layer that is optically bonded to a surface of the C plate-type retardation layer on a side opposite to the A plate-type retardation layer and acts as a negative C plate,

wherein the additional C plate-type retardation layer comprises a cross-linked chiral nematic or discotic liquid crystal, a total thickness of the C plate-type retardation layer and the additional C plate-type retardation layer is 6 µm or more, and a thickness of the C plate-type retardation layer is nearly equal to that of the additional C plate-type retardation layer.

8. The laminated retardation optical element according to claim 2, further comprising a polarization layer having a function of controlling a state of polarization of light that passes through the λ/4 retardation layer serving as the A plate-type retardation layer.

9. The laminated retardation optical element according to claim 8, wherein an angle between an axis of phase advance of the λ/4 retardation layer serving as the A plate-type retardation layer and an axis of transmission of the polarization layer is 45 ± 2 degrees.

10. The laminated retardation optical element according to claim 3, further comprising a polarization layer having a function of controlling a state of polarization of light that passes through the λ/2 retardation layer.

11. The laminated retardation optical element according to claim 10, wherein an angle between an axis of phase advance of the λ/2 retardation layer and an axis of transmission of the polarization layer is 15 ± 5 degrees.

12. The laminated retardation optical element according to claim 1, wherein a difference between mean refractive indices of the retardation layers bonded adjacently to each other is 0.05 or less.

13. The laminated retardation optical element according to claim 12, wherein nematic liquid crystalline components contained in the retardation layers bonded adjacently to each other are substantially the same.

14. The laminated retardation optical element according to claim 1, wherein the A plate-type retardation layer is subjected to patterning to make it into a predetermined pattern.

15. The laminated retardation optical element according to claim 1, wherein the C plate-type retardation layer is subjected to patterning to make it into a predetermined pattern.

16. A laminated retardation optical element comprising:

an A plate-type retardation layer that acts as an A plate; and

a C plate-type retardation layer that is optically bonded to a surface of the A plate-type retardation layer and acts as a positive C plate,

wherein the A plate-type retardation layer comprises a horizontally-aligned, cross-linked nematic liquid crystal, and the C plate-type retardation layer comprises a vertically-aligned, cross-linked nematic liquid crystal.

17. The laminated retardation optical element according to claim 16, wherein the C plate-type retardation layer has a thickness of 5 μm or less.

18. The laminated retardation optical element according to claim 17, further comprising an additional C plate-type retardation layer that is optically bonded to a surface of the C plate-type retardation layer on a

side opposite to the A plate-type retardation layer and acts as a positive C plate,

wherein the additional C plate-type retardation layer comprises a cross-linked nematic liquid crystal, a total thickness of the C plate-type retardation layer and the additional C plate-type retardation layer is 6 μm or more, and a thickness of the C plate-type retardation layer is nearly equal to that of the additional C plate-type retardation layer.

19. The laminated retardation optical element according to claim 16, further comprising a polarization layer having a function of controlling a state of polarization of light that passes through the A plate-type retardation layer.

20. The laminated retardation optical element according to claim 16, wherein a difference between mean refractive indices of the retardation layers bonded adjacently to each other is 0.05 or less.

21. The laminated retardation optical element according to claim 20, wherein nematic liquid crystalline components contained in the retardation layers bonded adjacently to each other are substantially the same.

22. The laminated retardation optical element according to claim 16, wherein the A plate-type retardation layer is subjected to patterning to make it into a predetermined pattern.

23. The laminated retardation optical element according to claim 16, wherein the C plate-type retardation layer is subjected to patterning to make it into a predetermined pattern.

24. A process of producing a laminated retardation optical element, comprising the steps of:

forming an A plate-type retardation layer that is in a form of a film and acts as an A plate by applying a nematic liquid crystal to an alignment layer and cross-

linking the applied liquid crystal; and

forming a C plate-type retardation layer that is in a form of a film and acts as a negative C plate by applying a chiral nematic or discotic liquid crystal to the formed A plate-type retardation layer and cross-linking the applied liquid crystal.

25. The process according to claim 24, wherein the A plate-type retardation layer is a $\lambda/4$ retardation layer having a function of bringing, to light that passes through this retardation layer, a phase difference corresponding to a quarter of a wavelength of the light.

26. The process according to claim 24, further comprising the step of forming a $\lambda/2$ retardation layer that is in a form of a film and has a function of bringing, to light that passes through this retardation layer, a phase difference corresponding to a half of a wavelength of the light by applying a nematic liquid crystal to the alignment layer and cross-linking the applied liquid crystal,

wherein, in the step of forming the A plate-type retardation layer, the A plate-type retardation layer is formed by applying the nematic liquid crystal not to the alignment layer but to the $\lambda/2$ retardation layer and cross-linking the applied liquid crystal.

27. The process according to claim 24, further comprising the step of forming an additional C plate-type retardation layer that is in a form of a film and acts as a negative C plate by applying a chiral nematic or discotic liquid crystal to the formed C plate-type retardation layer and cross-linking the applied liquid crystal.

28. The process according to claim 24, wherein, in the step of forming the C plate-type retardation layer on the A plate-type retardation layer, an alignment regulation power of a surface of the A type-plate retardation layer is used to align the C plate-type

retardation layer.

29. The process according to claim 28, wherein the alignment regulation power is imparted to the surface of the A plate-type retardation layer by subjecting this surface to rubbing treatment.

30. The process according to claim 24, further comprising the step of forming an additional alignment layer on a surface of the A plate-type retardation layer,

wherein, in the step of forming the C plate-type retardation layer, an alignment regulation power of a surface of the additional alignment layer is used to align the C plate-type retardation layer.

31. The process according to claim 30, wherein an azimuth of the alignment regulation power of the surface of the additional alignment layer is produced by means of rubbing treatment to which the additional alignment layer is subjected or of optical alignment of the additional alignment layer.

32. The process according to claim 26, wherein, in the step of forming the A plate-type retardation layer on the $\lambda/2$ retardation layer, an alignment regulation power of a surface of the $\lambda/2$ retardation layer is used to align the A plate-type retardation layer.

33. The process according to claim 32, wherein the alignment regulation power is imparted to the surface of the $\lambda/2$ retardation layer by subjecting this surface to rubbing treatment.

34. The process according to claim 26, further comprising the step of forming an additional alignment layer on a surface of the $\lambda/2$ retardation layer,

wherein, in the step of forming the A plate-type retardation layer, an alignment regulation power of a surface of the additional alignment layer is used to align the A plate-type retardation layer.

35. The process according to claim 34, wherein an azimuth of the alignment regulation power of the surface

of the additional alignment layer is produced by means of rubbing treatment to which the additional alignment layer is subjected or of optical alignment of the additional alignment layer.

36. A process for producing a laminated retardation optical element, comprising the steps of:

forming a C plate-type retardation layer that is in a form of a film and acts as a negative C plate by applying a chiral nematic or discotic liquid crystal to an alignment layer and cross-linking the applied liquid crystal; and

forming an A plate-type retardation layer that is in a form of a film and acts as an A plate by applying a nematic liquid crystal to the formed C plate-type retardation layer and cross-linking the applied liquid crystal.

37. The process according to claim 36, wherein the A plate-type retardation layer is a $\lambda/4$ retardation layer having a function of bringing, to light that passes through this retardation layer, a phase difference corresponding to a quarter of a wavelength of the light.

38. A liquid crystal display comprising:

a liquid crystal cell of VA mode;

a pair of polarizers between which the liquid crystal cell is sandwiched; and

a laminated retardation optical element according to claim 2, placed between the liquid crystal cell and at least one of the polarizers,

wherein the laminated retardation optical element is arranged so that the C plate-type retardation layer is situated on a side close to the liquid crystal cell.

39. The liquid crystal display according to claim 38, further comprising an additional $\lambda/4$ retardation layer having a function of bringing, to light that passes through this retardation layer, a phase difference corresponding to a quarter of a wavelength of

the light, placed on the liquid crystal cell on a side opposite to the laminated retardation optical element.

40. The liquid crystal display according to claim 39, further comprising an additional polarization layer having a function of controlling a state of polarization of light that passes through the additional $\lambda/4$ retardation layer, placed on the additional $\lambda/4$ retardation layer on a side opposite to the liquid crystal cell.

41. The liquid crystal display according to claim 40, wherein an angle between an axis of phase advance of the additional $\lambda/4$ retardation layer and an axis of transmission of the additional polarization layer is 45 ± 2 degrees.

42. The liquid crystal display according to claim 39, wherein an angle between an axis of phase advance of the additional $\lambda/4$ retardation layer and that of the $\lambda/4$ retardation layer contained in the laminated retardation optical element is substantially equal to 90 degrees.

43. The liquid crystal display according to claim 38, wherein liquid crystalline molecules sealed in the liquid crystal cell are inclined in two or more different directions when an electric field is applied.

44. A liquid crystal display comprising:

a liquid crystal cell of VA mode;

a pair of polarizers between which the liquid crystal cell is sandwiched; and

a laminated retardation optical element according to claim 3, placed between the liquid crystal cell and at least one of the polarizers,

wherein the laminated retardation optical element is arranged so that the C plate-type retardation layer is situated on a side close to the liquid crystal cell.

45. The liquid crystal display according to claim 44, further comprising: an additional $\lambda/4$ retardation layer having a function of bringing, to light that

passes through this retardation layer, a phase difference corresponding to a quarter of the wavelength of the light, placed on the liquid crystal cell on a side opposite to the laminated retardation optical element; and an additional λ/2 retardation layer having a function of bringing, to light that passes through this retardation layer, a phase difference corresponding to a half of a wavelength of the light, placed on the additional λ/4 retardation layer on a side opposite to the liquid crystal cell.

46. The liquid crystal display according to claim 45, wherein an angle between an axis of phase advance of the additional λ/4 retardation layer and that of the additional λ/2 retardation layer is 60 ± 10 degrees.

47. The liquid crystal display according to claim 45, further comprising an additional polarization layer having a function of controlling a state of polarization of light that passes through the additional λ/2 retardation layer, placed on the additional λ/2 retardation layer on a side opposite to the liquid crystal cell.

48. The liquid crystal display according to claim 47, wherein an angle between an axis of phase advance of the additional λ/2 retardation layer and an axis of transmission of the additional polarization layer is 15 ± 5 degrees.

49. The liquid crystal display according to claim 45, wherein an angle between an axis of phase advance of the additional λ/2 retardation layer and that of the λ/2 retardation layer contained in the laminated retardation optical element is substantially equal to 90 degrees.

50. The liquid crystal display according to claim 44, wherein liquid crystalline molecules sealed in the liquid crystal cell are inclined in two or more different directions when an electric field is applied.